

GLOSSARY OF TERMS

Acid Mine Drainage - acid drainage from adits or surface mine structures such as waste dumps that contains a high concentration of acidic sulfates, especially ferrous sulfate. Acid mine drainage results from the oxidation and hydrolysis of sulfides in spoil material.

Exploration - the work of investigating a mineral deposit to determine by geological surveys, geophysical surveys, geochemical surveys, bore holes, pits, and underground workings if it is feasible to mine. Exploration is undertaken to gain knowledge of the size, shape, position, characteristics, and value of the deposit.

Ecosystem - an interacting system of a biotic community and its environment.

Free board - the difference in elevation between the maximum operating water surface or top of the impoundment dam or embankment and the low point on the upstream edge of the crest. At minimum the free board must be two (2) feet plus the wave height at design flood conditions.

Ground Water - water at or below the water table. A broad definition includes all water below the surface of the ground.

Highwall - (1) the excavation face of exposed overburden and bedrock in a surface mine; (2) the face or bank on the uphill side of a contour mine.

Hydrostatic Pressure - pressure of a liquid under static (motionless) conditions.

Leachates - liquid that has been percolated through a soil or other medium that might contain dissolved metals or other potentially toxic substances.

Major Storm Event - 100 year 24-hour storm event. The maximum amount of precipitation that has fallen in a 24 hour period during the past 100 years (or for as long as records have been kept).

Mitigate - to cause to become less severe; to alleviate.

Nonpoint Source (surface water) - a source of surface water pollution that is diffuse and intermittent resulting from land surface disturbing activities such as mining, grazing, agriculture, or forest practices. Source of pollution that can not be traced to a specific, identifiable point of entrance into a waterway.

Nonpoint Source (ground water) - a potential source of ground water contamination that is diffuse and intermittent.

Overburden - soil, rock, and other materials which overlie mineral deposits and are removed in surface mining.

Oxidation - (oxidize) to combine with oxygen.

pH - Measure of acidity or alkalinity. Low pH denotes acidic conditions, high pH alkaline conditions. A pH of 6.5-7 is considered neutral.

Piping - the movement of soil particles by percolating water, leading to the

development of channels.

Pore Pressure - stress transmitted through the pore water (water filling the voids of soil).

Riparian Area - an area of land that is comprised of aquatic and riparian ecosystems and may include the adjacent terrestrial ecosystem if it directly influences the riparian or aquatic system. This zone extends approximately 100 feet on each side of the normal high water mark of a stream channel but may vary in width depending on local topography or land modifications.

Sulfides - compound of sulfur with more than one element.

Sulfidic waste - waste containing sulfide minerals.